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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,601	06/22/2000	Ian A. Stewart	WRLD-1-1007	8908

25315 7590 03/10/2004

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EXAMINER

FERRIS, DERRICK W

ART UNIT	PAPER NUMBER
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2663

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DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,601

Applicant(s)

STEWART, IAN A.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Amendment***

1. **Claims 2, 3, and 5-8** as amended are still in consideration for this application.

Applicant has canceled claims 1 and 4. Applicant has added claims 7 and 8.

2. Examiner **withdraws** the 112-first paragraph rejection(s) for Office action filed 11/03/03. Applicant has canceled the claims rendering the rejection moot.

3. Examiner **withdraws** the 112-second paragraph rejection(s) for Office action filed 11/03/03. Applicant has canceled the claims rendering the rejection moot.

4. Examiner does **not withdraw** the obviousness rejection to *Nguyen* in view of *LeMaire* for Office action filed 11/03/03. In addressing applicant's arguments in the response filed 02/09/04, examiner thanks applicant for pointing out system perspective (i.e., with respect to receiving a multicast join), however, the examiner notes such system perspective may not necessarily be reflected in the claimed subject matter. In particular, applicant argues that it is the receiver and not the initiator performing the steps or actions as recited in the claim. Specifically, applicant argues that it is the end user system.

Examiner notes that the end user system may not necessarily be recited in the claims. In particular, claim 7 recites receiving at a user system in general and claim 8 recites receiving at an apparatus in general. As such, *Nguyen* discloses that a server is used for determining how users communicate (e.g., see column 3, line 67 – column 4, line 1).

Thus at issue is whether a server acts as a “receiving” user system. As the server receives multicast join messages, the examiner argues that such a system is a receiving user system. In particular, *Nguyen* teaches that clients initiate a connection with a server (e.g., see column 3, lines 61-63 and column 5, lines 23-29) such that the server acts as an

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intermediate device (e.g., see column 6, lines 28-33 and column 7, lines 13-18) between the initiating client device and the destination or end user system. Therefore, as the server is in the receiving path, the examiner argues that the receiver acts as a receiving user system coupled to the public data network. However, also see the new rejection provided below for an end-user system.

Claim Objections

5. **Claim 8** is objected to because of the following informalities: line 11 “if it a request for a multicast join” is awkward, please fix. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 2, 3, and 5-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,006,267 to *Nguyen et al.* (“*Nguyen*”) in view of U.S. Patent No. 6,169,741 to *LeMaire et al.* (“*LeMaire*”).

As to **claim 7**, *Nguyen* discloses a method and system for connecting different hosts that have different communications protocols. In particular, *Nguyen* teaches the initial steps of (1) determining if a request to receiving a multicast signal has occurred, (2) testing the subnetwork, and (3) implementing a first multicast protocol. For example, support is provided in figure 6 of *Nguyen* [see column 5, lines 38-67].

Examiner notes that the reference is unclear on testing and using a “subsequent multicast protocol” if the result of a test for the first multicast protocol is below a certain criteria. Specifically, examiner notes the reference teaches testing to see if multicast in general is supported (i.e., if multicasting is not supported then unicast is selected). Examiner notes that the reference also mentions that other multicast protocols (emphasis plural) are supported (see column 3, lines 23-26). Thus examiner notes that it would have been obvious to one skilled in the art prior to applicant’s invention to perform a “reachability test” (i.e., pinging) for a subsequent multicast protocol. As support, the background of *LeMaire* discloses that routers use more than one multicast routing protocol [see column 5, lines 44-55]. Thus one skilled in the art would have been motivated to look for a second multicast routing protocol if a first multicast routing protocol is not present. In other words, one skilled in the art would have been motivated to repeat testing a subnetwork until the device finds a compatible multicast routing protocol such that one possible motivation would be for compatibility. Examiner notes that *Nguyen* further teaches the concept since if a first protocol is not “compatible” then one skilled in the art is motivated to use a second “compatible” protocol (i.e., *Nguyen* teaches selecting the most optimal means for disseminating information from one host to more than one host) [column 1, lines 44-55]. Finally, examiner notes that applicant fails to disclose how a test is performed for a second multicast routing protocol. In other words, applicant’s specification teaches using a PING test as a first test for a first multicast protocol (e.g., as disclosed in figure 5). Applicant is silent or deficient to using a PING test to test for a subsequent

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multicast protocol (e.g., as shown in figure 5). Thus examiner notes that a receipt of any message would suffice as supported in applicant's written disclosure on page 5, lines 1-3 since applicant does not provide a further relationship between a message and a PING test (i.e., figure 5 only supports a PING test for the PIM protocol). Thus examiner notes a reasonable but broad interpretation of a test for a subsequent multicast protocol.

As to **claim 2**, examiner notes a reasonable but broad interpretation of "does not include the user system".

As to **claim 3**, *LeMaire* teaches using a default multicast protocol using a reasonable but broad interpretation of "default".

As to **claim 8**, see the rejection for claim 7.

As to **claim 5**, see the rejection for claim 2.

As to **claim 6**, see the rejection for claim 3.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 2, 3, and 5-8** rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,233,017 B1 to *Chaddha*.

As to **claim 2**, *Chaddha* discloses a system and method for multiple multicasting of multimedia streams. In particular, *Chaddha* discloses a client that can intelligently join and leave multiple multicast group MMGs as needed (e.g., see column 12, lines 50-53). In particular, such groups could be either lower content or higher content base layers. It is important to note that examiner assumes a reasonable but broad interpretation of “multicast protocol”. In particular, examiner notes a multicast video stream as part of a multicast protocol (i.e., not clearly recited by applicant is a multicast routing protocol such that examiner notes that a layer taught by *Chaddha* is one example of a multicast protocol). As such, *Chaddha* discloses making an intelligent decision where the client tests the network for a first base layer protocol (see column 14, lines 55 to column 15, line 15). Thus the client is empowered to choose a multicast protocol based on certain criteria (e.g., available bandwidth) from a group of multicast protocols. Thus inherently taught by a “control algorithm” are the steps of first testing a multicast protocol and then implementing the multicast protocol if the test is successful (if the test is not successful then another multicast protocol is chosen). For example, the client will leave certain multicast groups if congestion occurs such that a subsequent multicast protocol is chosen. Also note that the client continues to select a protocol for as long as the connection is maintained such that process is repeated. Finally, although the preferred embodiment taught by *Chaddha* is for a single base layer, more than one base layer can be used (e.g., see column 7, lines 20-25).

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As to **claim 2**, examiner notes a reasonable but broad interpretation of “does not include the user system”.

As to **claim 3**, *LeMaire* teaches using a default multicast protocol using a reasonable but broad interpretation of “default”.

As to **claim 8**, see the rejection for claim 7.

As to **claim 5**, see the rejection for claim 2.

As to **claim 6**, see the rejection for claim 3.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 3/5/09